

**Flood Control Project Maintenance
Levee Inspections**

Fall 2013 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including DWR Erosion Survey

San Joaquin River Basin

RD2063	Overall LMA Rating	Total LMA Miles	* Overall LMA Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall LMA Rating is M instead of A.					
Reclamation District No. 2063 Crows Landing	M *	10.63						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Vegetation	0.14		0.14	1.32%				
Trim / Thin Trees	0.01		0.01	0.09%				
Encroachments					0.02	0.46		
Animal Control	0.02		0.02	0.19%				
Erosion / Bank Caving	0.05	0.01	0.09	0.85%				
Flood Preparedness & Training	0.11		0.11	1.04%				
<i>LMA Totals:</i>	0.33	0.01	0.37	3.48% *	0.02	0.46	0.00	0.00

**Flood Control Project Maintenance
Levee Inspections**
LMA District Cover Sheet
Fall 2013 Levee Inspection Results

Reclamation District No. 2063 Crows Landing

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
* Overall LMA Rating (Fall Only)			M	

** Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating.

*
SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2013 Levee Inspection Results

Reclamation District No. 2063 Crows Landing

Waterway			Bank	Unit Miles
Unit No. 01 San Joaquin River			Right	10.63
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			M	
Date of Inspection	05/14/2013 - 05/14/2013		11/07/2013 - 11/07/2013	
DWR Inspector	Richard Willoughby		Richard Willoughby	
Accompanied By				

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 2063 Crows Landing

Waterway				Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River				Right	10.63	11/07/2013 11/07/2013	Richard Willoughby

LMR No.	Levee Mile		Category	Item	Location * + Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End					Start	End	Photo
1	0.00	0.00	Earthen Levee	Operations & Maintenance Manuals	LS A Ma		°	°	12
DWR ID: DWR_RD2063_01_s_2013_12									
2	0.00	0.00	Earthen Levee	Emergency Supplies & Equipment	LS A Ma		°	°	15
DWR ID: DWR_RD2063_01_s_2013_15									
3	0.00	0.00	Earthen Levee	Flood Preparedness & Training	LS M Ma		°	°	21
DWR ID: DWR_RD2063_01_s_2013_21									
4	0.00	10.58	Earthen Levee	Crown Surface / Depressions / Rutting	CR A/W Ma	C3 : Add appropriate gravel or road base. Grade and compact.	37.478842 ° -121.044627 °	37.390455 ° -120.941945 °	27
DWR ID: DWR_RD2063_01_s_2012_27									
5	0.02	0.51	Earthen Levee	Vegetation	WSA/W Ma	V2 : Remove the wild growth other than native grasses from the levee slopes.	37.478550 ° -121.044603 °	37.471548 ° -121.044553 °	3 Y
DWR ID: DWR_RD2063_01_s_2012_3									
6	0.02	0.51	Earthen Levee	Vegetation	LS A/W Ma	V2 : Remove the wild growth other than native grasses from the levee slopes.	37.478548 ° -121.044605 °	37.471545 ° -121.044553 °	2
DWR ID: DWR_RD2063_01_s_2012_2									
7	0.03	0.49	Earthen Levee	Encroachments	LS U En	DT : Ditch Inspector Comments: Ditch on landside has encroached into the berm and toe of the levee.	37.478470 ° -121.044598 °	37.471848 ° -121.044635 °	18 Y
DWR ID: DWR_RD2063_01_s_2012_18									
8	0.14	0.22	Earthen Levee	Encroachments	LS A/W Ma	PR : Prunings	37.476855 ° -121.044622 °	37.475658 ° -121.044603 °	16 Y
DWR ID: DWR_RD2063_01_s_2012_16									
9	1.41	1.41	Earthen Levee	Animal Control	WSA/W Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	37.463582 ° -121.032263 °	37.463582 ° -121.032263 °	36
DWR ID: DWR_RD2063_01_s_2013_36									
10	1.47	1.50	Earthen Levee	Vegetation	LS A/W Ma	V2 : Remove the wild growth other than native grasses from the levee slopes.	37.462723 ° -121.032020 °	37.462303 ° -121.031928 °	8
DWR ID: DWR_RD2063_01_s_2012_8									
11	1.54	1.54	Earthen Levee	Slope Stability	LS A/W Ma	S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.	37.461762 ° -121.031822 °	37.461762 ° -121.031822 °	10 Y
DWR ID: DWR_RD2063_01_s_2012_10									
12	1.57	1.57	Earthen Levee	Animal Control	LS A/W Ma	A1 : Exterminate rodents and backfill and compact or grout burrows.	37.461322 ° -121.031785 °	37.461322 ° -121.031785 °	4
DWR ID: DWR_RD2063_01_s_2012_4									
13	1.69	1.69	Earthen Levee	Animal Control	LS A/W Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	37.459813 ° -121.032372 °	37.459813 ° -121.032372 °	11 Y
DWR ID: DWR_RD2063_01_s_2012_11									
14	1.95	1.95	Earthen Levee	Encroachments	LS A/W Ma	GA : Garbage Inspector Comments: Garbage at landside toe and berm.	37.456460 ° -121.033730 °	37.456460 ° -121.033730 °	117 Y
DWR ID: DWR_RD2063_01_s_2012_117									

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 2063 Crows Landing

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	10.63	11/07/2013 11/07/2013	Richard Willoughby

LMR No.	Levee Mile		Category	Item	* Location + Rating + Ma	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End					Start	End	
15	2.32	2.52	Earthen Levee	Vegetation	LS A/W Ma	V2 : Remove the wild growth other than native grasses from the levee slopes.	37.451895 ° -121.030492 °	37.449892 ° -121.028072 °	1 Y
DWR ID: DWR_RD2063_01_s_2012_1									
16	2.53	2.56	Earthen Levee	Vegetation	LS A/W Ma	V2 : Remove the wild growth other than native grasses from the levee slopes. Inspector Comments: Dense vegetation at landside toe.	37.449787 ° -121.027943 °	37.449432 ° -121.027472 °	13 Y
DWR ID: DWR_RD2063_01_s_2012_13									
17	2.72	2.79	Earthen Levee	Animal Control	LS A/W Ma	A2 : Repair the levee slope damaged by livestock and prevent large animal access.	37.447512 ° -121.026050 °	37.446574 ° -121.025643 °	982
DWR ID: DWR_RD2063_01_s_2012_982									
18	2.78	2.84	Earthen Levee	Vegetation	LS A/W Ma	V2 : Remove the wild growth other than native grasses from the levee slopes. Inspector Comments: Dense vegetation at landside toe.	37.446722 ° -121.025640 °	37.445925 ° -121.025528 °	14
DWR ID: DWR_RD2063_01_s_2012_14									
19	3.06	3.06	Earthen Levee	Erosion / Bank Caving	WSA/W Ma	E2 : Schedule repair of erosion site prior to the next inspection. Inspector Comments: Several erosion sites located along waterside slope and toe approx. 100' plus feet long, 18-24 inches vertical cuts. Erosion site was repaired by district.	37.442816 ° -121.025421 °	37.442816 ° -121.025421 °	30 Y
DWR ID: DWR_RD2063_01_f_2012_30									
20	3.07	3.26	Supplemental	DWR Erosion Survey	WS C Ma	Inspector Comments: 08/30/2013: Site has been further enhanced by adding more broken concrete blocks to the river bank. The berm has been widened to approximately 50 feet along the site. 07/24/2012: Learned from the district that the upstream erosion has been repaired by placing broken concrete blocks. Visual inspection at the repaired site found no new erosion development. No significant change observed on the site at the downstream section of the repaired erosion site. 10/14/2011. This site was reported on Jan. 18. 2011. The first 100' of erosion appears to be a previous cut with fresh activity. At station 2+00 the district president indicated that 60 - 80' of material eroded. The remainder berm width is at least 32 ft from the levee toe. As the levee is not at risk at this time, the site is not rated, but needs to be closely monitored for possible erosion failure during the upcoming flooding season. [2013 Site ID:RD2063U01RM103.49]	37.442305 ° -121.022727 °	37.442305 ° -121.022727 °	19
DWR ID:									
21	3.20	3.20	Earthen Levee	Animal Control	WS M Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	37.442400 ° -121.023095 °	37.442400 ° -121.023095 °	37
DWR ID: DWR_RD2063_01_s_2013_37									
22	3.41	3.70	Earthen Levee	Vegetation	LS A/W Ma	V2 : Remove the wild growth other than native grasses from the levee slopes.	37.440438 ° -121.020487 °	37.436906 ° -121.017835 °	38
DWR ID: DWR_RD2063_01_f_2012_38									
23	3.77	3.82	Earthen Levee	Animal Control	LS A/W Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	37.436197 ° -121.016937 °	37.435732 ° -121.016090 °	29 Y
DWR ID: DWR_RD2063_01_s_2012_29									

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 2063 Crows Landing

Waterway				Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River				Right	10.63	11/07/2013 11/07/2013	Richard Willoughby

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	
24	3.96	4.10	Earthen Levee	Vegetation	LS	M Ma	V2 : Remove the wild growth other than native grasses from the levee slopes.	37.434403 ° -121.014298 °	37.432653 ° -121.013327 °	17 Y
DWR ID: DWR_RD2063_01_s_2012_17										
25	4.67	4.67	Earthen Levee	Encroachments	LS	M En	PI : Pipe	37.429620 ° -121.005434 °	37.429620 ° -121.005434 °	6 Y
DWR ID: DWR_RD2063_01_f_2013_6										
26	4.68	4.68	Earthen Levee	Encroachments	WS	M En	CR : Crops Inspector Comments: Landowner planted grape vines and fruit trees and water tank on waterside berm without a permit from the CVFPB.	37.429638 ° -121.005348 °	37.429638 ° -121.005348 °	31 Y
DWR ID: DWR_RD2063_01_s_2012_31										
27	4.71	4.71	Earthen Levee	Trim / Thin Trees	LS	M Ma	T1 : Trim trees to at least five feet above ground level.	37.429892 ° -121.004768 °	37.429892 ° -121.004768 °	20 Y
DWR ID: DWR_RD2063_01_s_2012_20										
28	5.05	5.11	Earthen Levee	Encroachments	LS A/W	M Ma	DT : Ditch Inspector Comments: Farmer removed irrigation ditch from landward toe.	37.428202 ° -120.999518 °	37.427518 ° -120.999362 °	119 Y
DWR ID: DWR_RD2063_01_s_2012_119										
29	5.16	5.16	Earthen Levee	Encroachments	WS	C Ma	MA : Material Inspector Comments: Concrete rubble with rebar	37.426887 ° -120.999368 °	37.426887 ° -120.999368 °	40 Y
DWR ID: DWR_RD2063_01_s_2013_40										
30	5.48	5.48	Earthen Levee	Erosion / Bank Caving	LS	U Ma	E2 : Schedule repair of erosion site prior to the next inspection. Inspector Comments: Erosion due to irrigation system at landward toe.	37.422827 ° -121.001788 °	37.422827 ° -121.001788 °	32 Y
DWR ID: DWR_RD2063_01_s_2012_32										
31	6.05	6.63	Earthen Levee	Vegetation	WSA/W	M Ma	V2 : Remove the wild growth other than native grasses from the levee slopes.	37.416235 ° -120.997563 °	37.411285 ° -120.998188 °	22 Y
DWR ID: DWR_RD2063_01_s_2012_22										
32	6.09	6.09	Earthen Levee	Animal Control	LS	M Ma	A1 : Exterminate rodents and backfill and compact or grout burrows.	37.415887 ° -120.998083 °	37.415887 ° -120.998083 °	5 Y
DWR ID: DWR_RD2063_01_s_2012_5										
33	6.15	6.36	Earthen Levee	Vegetation	LS A/W	M Ma	V2 : Remove the wild growth other than native grasses from the levee slopes.	37.415488 ° -120.998988 °	37.413473 ° -121.001680 °	120 Y
DWR ID: DWR_RD2063_01_s_2012_120										
34	6.78	6.81	Earthen Levee	Animal Control	WSA/W	M Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	37.411877 ° -120.995685 °	37.411725 ° -120.995092 °	41 Y
DWR ID: DWR_RD2063_01_s_2013_41										
35	6.89	6.89	Earthen Levee	Trim / Thin Trees	LS A/W	M Ma	T1 : Trim trees to at least five feet above ground level.	37.411785 ° -120.993548 °	37.411785 ° -120.993548 °	39 Y
DWR ID: DWR_RD2063_01_s_2012_39										
36	7.69	7.69	Earthen Levee	Trim / Thin Trees	LS A/W	M Ma	T1 : Trim trees to at least five feet above ground level.	37.403516 ° -120.985718 °	37.403516 ° -120.985718 °	7 Y
DWR ID: DWR_RD2063_01_s_2012_7										
37	7.81	7.90	Earthen Levee	Vegetation	LS A/W	M Ma	V2 : Remove the wild growth other than native grasses from the levee slopes.	37.402400 ° -120.984087 °	37.401563 ° -120.982775 °	23 Y
DWR ID: DWR_RD2063_01_s_2012_23										

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 2063 Crows Landing

Waterway				Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River				Right	10.63	11/07/2013 11/07/2013	Richard Willoughby

LMR No.	Levee Mile		Category	Item	Location * + Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End					Start	End	Photo
38	7.88	7.88	Earthen Levee	Trim / Thin Trees	LS A/W Ma	T1 : Trim trees to at least five feet above ground level.	37.401774 ° -120.983132 °	37.401774 ° -120.983132 °	9
DWR ID: DWR_RD2063_01_s_2012_9									
39	8.06	8.23	Earthen Levee	Vegetation	LS A/W Ma	V2 : Remove the wild growth other than native grasses from the levee slopes.	37.400930 ° -120.980157 °	37.401148 ° -120.977320 °	24
DWR ID: DWR_RD2063_01_s_2012_24									
40	8.17	8.17	Earthen Levee	Trim / Thin Trees	LS A/W En	T1 : Trim trees to at least five feet above ground level.	37.401222 ° -120.978317 °	37.401222 ° -120.978317 °	33
DWR ID: DWR_RD2063_01_s_2012_33									
41	8.54	8.54	Earthen Levee	Encroachments	LS A/W En	CR : Crops Inspector Comments: Farmer did move hay stack outside the fifteen foot right-of-way.	37.398673 ° -120.972922 °	37.398673 ° -120.972922 °	121 Y
DWR ID: DWR_RD2063_01_s_2012_121									
42	9.05	9.05	Earthen Levee	Animal Control	WSA/W Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	37.392405 ° -120.968492 °	37.392405 ° -120.968492 °	25
DWR ID: DWR_RD2063_01_s_2013_25									
43	10.56	10.61	Earthen Levee	Erosion / Bank Caving	WS M Ma	E2 : Schedule repair of erosion site prior to the next inspection. Inspector Comments: Repair erosion on waterward shoulder. Erosion cause by farm equipment.	37.390503 ° -120.942368 °	37.390483 ° -120.941480 °	42 Y
DWR ID: DWR_RD2063_01_s_2013_42									

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 2063 Crows Landing

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	10.63	11/07/2013 11/07/2013	Richard Willoughby

Levee Mile Report Line	5
Start Levee Mile	0.02
End Levee Mile	0.51
Location	Water Side
Category	Earthen Levee
Item	Vegetation

Looking south at typical view of waterside and landside slopes.

richard_f_20131108_157.JPG



Levee Mile Report Line	7
Start Levee Mile	0.03
End Levee Mile	0.49
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking north at ditch on landside berm and toe.

richard_f_20130930_013.jpg



Levee Mile Report Line	7
Start Levee Mile	0.03
End Levee Mile	0.49
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking south at canal-ditch at landside berm and toe.

richard_f_20130930_014.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 2063 Crows Landing

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	10.63	11/07/2013 11/07/2013	Richard Willoughby

Levee Mile Report Line	7
Start Levee Mile	0.03
End Levee Mile	0.49
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking northeast at canal-ditch on landside berm.

richard_f_20130930_015.jpg



Levee Mile Report Line	8
Start Levee Mile	0.14
End Levee Mile	0.22
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking north at prunings stacked on landside toe and berm.

richard_f_20130930_011.jpg



Levee Mile Report Line	11
Start Levee Mile	1.54
End Levee Mile	1.54
Location	Land Side
Category	Earthen Levee
Item	Slope Stability

Looking east at landside slope damage (six to eight inch erosion) by vehicle.

richard_f_20130930_006.jpg



* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 2063 Crows Landing

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	10.63	11/07/2013 11/07/2013	Richard Willoughby

Levee Mile Report Line	11
Start Levee Mile	1.54
End Levee Mile	1.54
Location	Land Side
Category	Earthen Levee
Item	Slope Stability

Looking west at landside slope damage cause by vehicle traffic.

richard_f_20130930_007.jpg



Levee Mile Report Line	13
Start Levee Mile	1.69
End Levee Mile	1.69
Location	Land Side
Category	Earthen Levee
Item	Animal Control

Looking east at squirrel holes on landside slope.

richard_f_20130930_008.jpg



Levee Mile Report Line	14
Start Levee Mile	1.95
End Levee Mile	1.95
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking east at garbage at landside toe.

richard_f_20130930_023.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 2063 Crows Landing

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	10.63	11/07/2013 11/07/2013	Richard Willoughby

Levee Mile Report Line	16
Start Levee Mile	2.53
End Levee Mile	2.56
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking south at dense vegetation on landside toe. (Before 2012)

richard_f_20130930_009.jpg



Levee Mile Report Line	16
Start Levee Mile	2.53
End Levee Mile	2.56
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking south at vegetation removed from landward toe. (After 2013)

richard_f_20131108_158.JPG



Levee Mile Report Line	16
Start Levee Mile	2.53
End Levee Mile	2.56
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking north at removed vegetation from landward toe. (After fall 2013)

richard_f_20131108_159.JPG



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 2063 Crows Landing

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	10.63	11/07/2013 11/07/2013	Richard Willoughby

Levee Mile Report Line	19
Start Levee Mile	3.06
End Levee Mile	3.06
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking southwest at river erosion at waterside slope and toe.

richard_f_20130930_017.jpg



Levee Mile Report Line	19
Start Levee Mile	3.06
End Levee Mile	3.06
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking northwest at river erosion at waterside slope and toe.

richard_f_20130930_018.jpg



Levee Mile Report Line	19
Start Levee Mile	3.06
End Levee Mile	3.06
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking southwest at repaired erosion site on waterward slope and toe.

richard_f_20130930_019.JPG



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 2063 Crows Landing

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	10.63	11/07/2013 11/07/2013	Richard Willoughby

Levee Mile Report Line	23
Start Levee Mile	3.77
End Levee Mile	3.82
Location	Land Side
Category	Earthen Levee
Item	Animal Control

Looking at typical view of a squirrel hole on landside shoulder.

richard_f_20130930_016.jpg



Levee Mile Report Line	24
Start Levee Mile	3.96
End Levee Mile	4.10
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking southeast at dense vegetation along landside toe. (Before Fall 2012)

richard_f_20130930_012.jpg



Levee Mile Report Line	24
Start Levee Mile	3.96
End Levee Mile	4.10
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking south at removed vegetation from landward toe. (After fall 2013)

richard_f_20131108_160.JPG



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 2063 Crows Landing

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	10.63	11/07/2013 11/07/2013	Richard Willoughby

Levee Mile Report Line	26
Start Levee Mile	4.68
End Levee Mile	4.68
Location	Water Side
Category	Earthen Levee
Item	Encroachments

Looking south at grapevines and fruit trees on waterside berm.

richard_f_20130930_020.jpg



Levee Mile Report Line	26
Start Levee Mile	4.68
End Levee Mile	4.68
Location	Water Side
Category	Earthen Levee
Item	Encroachments

Looking west at water tank on waterward berm.

richard_f_20130930_021.JPG



Levee Mile Report Line	28
Start Levee Mile	5.05
End Levee Mile	5.11
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking northeast at irrigation ditch at landside toe.

richard_f_20130930_024.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 2063 Crows Landing

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	10.63	11/07/2013 11/07/2013	Richard Willoughby

Levee Mile Report Line	28
Start Levee Mile	5.05
End Levee Mile	5.11
Location	Land Side
Category	Earthen Levee
Item	Encroachments
Looking northwest at irrigation ditch removed from landward toe.	
richard_f_20130930_025.JPG	



Levee Mile Report Line	30
Start Levee Mile	5.48
End Levee Mile	5.48
Location	Land Side
Category	Earthen Levee
Item	Erosion / Bank Caving
Looking north at irrigation system at landward toe.	
richard_f_20131108_161.JPG	



Levee Mile Report Line	30
Start Levee Mile	5.48
End Levee Mile	5.48
Location	Land Side
Category	Earthen Levee
Item	Erosion / Bank Caving
Looking south at several erosion sites at landward toe.	
richard_f_20131108_162.JPG	



* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 2063 Crows Landing

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	10.63	11/07/2013 11/07/2013	Richard Willoughby

Levee Mile Report Line	30
Start Levee Mile	5.48
End Levee Mile	5.48
Location	Land Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking west at erosion and irrigation system at landward toe.

richard_f_20131108_163.JPG



Levee Mile Report Line	33
Start Levee Mile	6.15
End Levee Mile	6.36
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking south at dense vegetation on landside toe.

richard_f_20130930_026.jpg



Levee Mile Report Line	41
Start Levee Mile	8.54
End Levee Mile	8.54
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking south at hay stacked near landside toe.

richard_f_20130930_027.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 2063 Crows Landing

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	10.63	11/07/2013 11/07/2013	Richard Willoughby

Levee Mile Report Line	41
Start Levee Mile	8.54
End Levee Mile	8.54
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking northwest at hay pile still within easement.

richard_f_20130930_028.JPG



Levee Mile Report Line	41
Start Levee Mile	8.54
End Levee Mile	8.54
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking north at hay stack outside the fifteen foot right-of-way. (Fall 2013)

richard_f_20131108_164.JPG



Levee Mile Report Line	43
Start Levee Mile	10.56
End Levee Mile	10.61
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking north at erosion on waterward shoulder.

richard_f_20130930_022.JPG



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement